## **ABSTRACT**

**Objective(s):** Tracking the success or failure of initiatives intended to decrease wait times requires a reliable measure of waiting time. VA operations staff has struggled with finding the most reliable measuring of waiting times using capacity measures (e.g. number of days until the first next available appointment (FNA)), time-stamp measures (e.g. number of days when appointment is created in system and appointment is scheduled (CD); number of days between when a patient desires an appointment and the appointment is scheduled (DD)) or access list measures (e.g. number of individuals waiting for an appointment at a point in time (EWL, P14)). This is the first study to directly compare these alternative measures of wait times and examine which measure performs best when predicting patient satisfaction and health outcomes. Specific objectives are:

Objective 1: Examine the correlation between the five different wait time measures Objective 2: Estimate the relationships between patient satisfaction and different wait time measures

Objective 3: Estimate the relationship between primary care wait times among patients with diabetes and short-term health outcomes

Objective 4: Estimate the relationship between primary care wait times among patients with diabetes and long-term health outcomes

**Research design:** This retrospective study of secondary data obtained between 2007 and 2011 will compare various measures of wait times to examine which measure best predicts patient satisfaction and short and long-term health outcomes. Multiple station and patient-level administrative data sets from the VA and Medicare will be combined to compare the effectiveness of alternative wait time measures.

Methods: Objectives 1 and 2 are facility-level analyses that examine the correlation between wait time measures and the correlation between wait time measures and facility-level patient satisfaction. Objectives 3 and 4 will examine the effect of waiting for outpatient care, defined by the different wait time measures on short (e.g. glycated hemoglobin (HbA1c)) and long-term outcomes (e.g. mortality, stroke) among a sample of patients diagnosed with diabetes. The criteria for identifying diabetes will be a prescription for anti-diabetes medication and/or 2+ diabetes codes for inpatient and/or outpatient visits over a two month period in 2007. Heckman selection models will predict the presence and value of HbA1c and logistic regression models will predict the likelihood of experiencing mortality, stroke, heart attack or preventable hospitalization. Models will include standard demographics, risk adjustors for health status and facility and seasonal fixed effects to control for facility quality differences, casemix selection and seasonal effects.

**Findings:** N/A

Clinical relationships: N/A

**Impact/Significance:** This is the first project to systematically compare alternative measures of wait times and determine which measure performs best when predicting patient satisfaction and health outcomes. Findings from this study will help VA operations managers refine their efforts to find the best measure of wait times and implement appropriate performance measures.